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HIGH SENSITIVITY DRY-DEVELOPABLE PHOTORESIST FOR DEEP UV

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Abstract of JP3152544

PURPOSE: To enable dry development by using a phenol-aldehyde type condensation product and a photoactive compd. generating a strong acid which enables the reaction of hydroxy groups with an organometallic reagent when the compd. is exposed with deep UV.

CONSTITUTION: A phenol-aldehyde type condensation product represented by formula I and a radiation-degradable acid generating material such as a metallic or nonmetallic onium salt, a tosylate or a non-metal sulfonic acid precursor as a radiation sensitive material are used. In the formula I, R is H, -CH3 or phenyl, R' is H, alkyl or aryl, R" is H, halogen, nitro, alkoxy, alkyl, aryl or hydroxy and the basic arom. ring may be condensed with other cyclic structure so as to form a naphthol or anthracene unit. By such constitution, dry development is enabled.

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